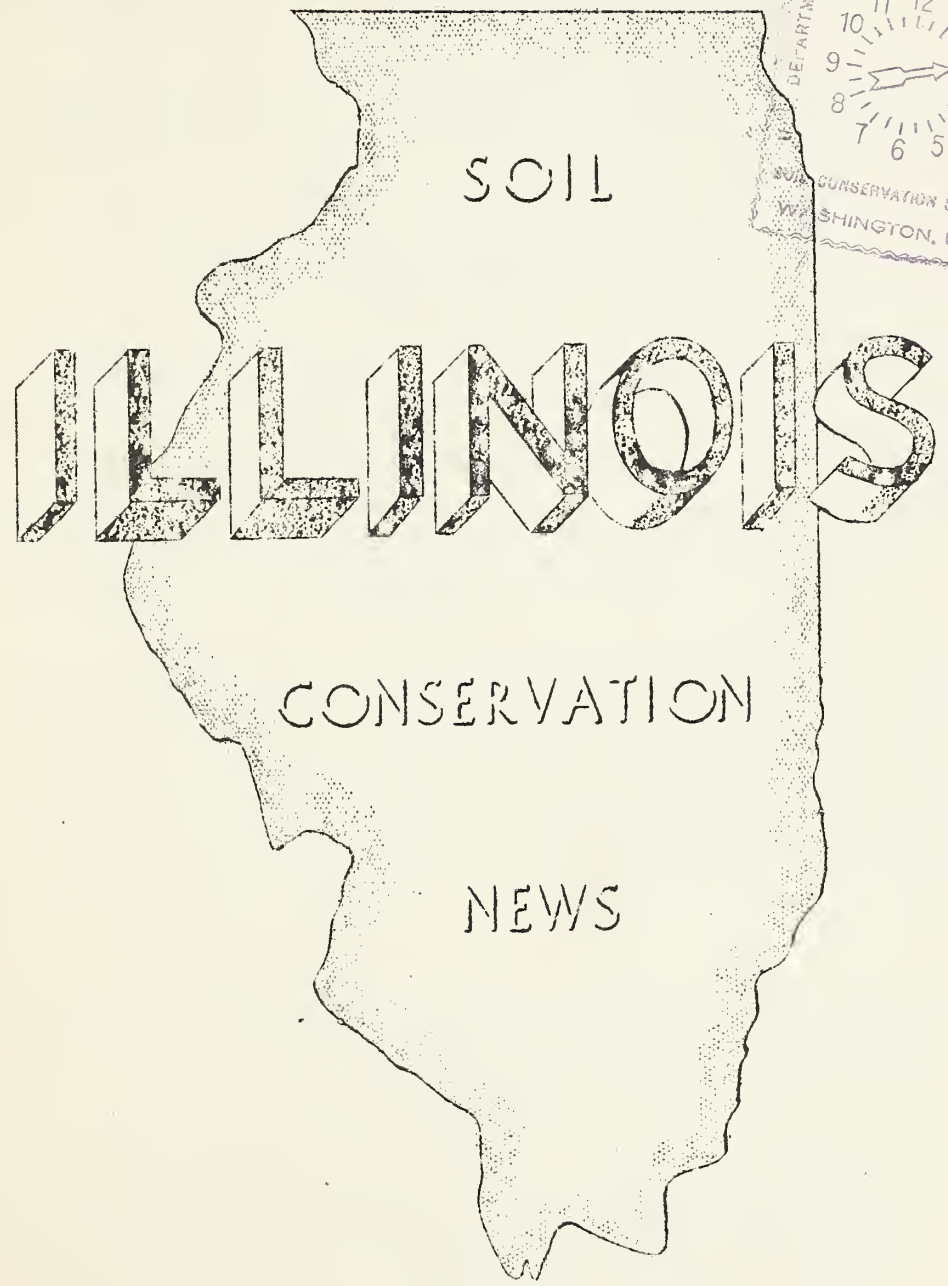
U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE



SOIL CONSERVATION NEWS

ILLINOIS

JANUARY–FEBRUARY
1936

SOIL CONSERVATION NEWS

The Illinois Soil Conservation News is published at Champaign by the Soil Conservation Service of the U. S. Department of Agriculture to create a greater interest in the conservation of soil and water on Illinois farms.

F. A. Fisher, State Coordinator

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THREE ILLINOIS MEN ON REGIONAL STAFF

by F. A. Fisher

The United States has been divided into eleven regions for the purpose of facilitating and standardizing the program of the Soil Conservation Service of the U. S. Department of Agriculture. This grouping of states having similar land use practices and soils and climatic conditions into regions will coordinate the erosion control work more closely and will avoid duplication of efforts in research in the seperate states. A regional office brings the national program closer to the states and makes for more unity between the local program and the work of the other bureaus in the U. S. Department of Agriculture.

The work in the upper Mississippi Valley Region, which includes the states of Illinois, Missouri, Minnesota, Iowa, and Wisconsin, will be directed by R. E. Uhland, regional conservator, from the regional office at Des Moines, Iowa. Mr. Uhland has been in charge of the erosion control demonstration work in Iowa and Missouri since October 1933. Previous to that time, he was in charge of the Federal Erosion Experiment Station at Bethany, Missouri. The experience and training acquired in these two positions make him well equipped to direct the Soil Conservation Service program in Region 5.

Mr. Uhland will be assisted by R. H. Davis, who has been in charge of the erosion control activities of the Soil Conservation Service in Minnesota and Wisconsin. Previous to his employment by the Soil Conservation Service in the fall of 1933, Mr. Davis was in charge of the Federal Erosion Experiment Station at LaCrosse, Wisconsin.

Three members of Mr. Uhland's regional technical staff come from Illinois. They are E. A. Norton, principal soil scientist, who at the time of his appointment was regional director of Resettlement Administration and formerly was with the Illinois State Soil Survey; J. B. Andrews, chief soil conservationist, who has been a member of the Farm Management Department of

(Continued on page 2)

the College of Agriculture for more than ten years, seven of which were spent making practical farm studies in cooperation with a group of 200 Illinois cornbelt farmers and S. S. Locke, chief forester, who has been connected with the Illinois Department of Conservation for seven years, serving as state forester during the past year. Other members of the regional technical staff are; R. W. Oberlin of Missouri, in charge of engineering; R. T. Kirkpatrick of Missouri, in charge of agronomic work; Warren W. Chase of Wisconsin, in charge of wildlife and rodent control work; and Wyman S. Smith of Wisconsin, in charge of information.

Within each state, there is a state coordinator, in charge of all phases of the erosion control program carried on by the projects and camps within his state. He will correlate the Soil Conservation Service program within the state with the recommendations made by the staff of the state College of Agriculture and the erosion control program of the Agricultural Extension Service.

In Illinois, this cooperative relationship is carried out in accordance with a MEMORANDUM OF UNDERSTANDING entered into between the Soil Conservation Service and the College of Agriculture of the University of Illinois, and under the direction of a State Advisory Committee -- made up of H. W. Mumford, dean of the College of Agriculture and director of the Experiment Station and Extension Service, chairman; Dr. W. L. Burlison, head of Department of Agronomy of the College of Agriculture; E. A. Norton, regional director of Resettlement Administration at the time of his appointment; and F. A. Fisher, state coordinator of the Soil Conservation Service.

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NEWS FLASH FROM HAWAII

C. C. C. workers in Hawaii have constructed a 40-mile fence up the side of Mauna Kea, highest mountain peak in the Pacific, enclosing 68,000 acres of forest reserve, to protect the young trees from wild goats.

MORE STRIKING NEWS FROM ILLINOIS.

C. C. C. boys built 144 miles of fence in Illinois during 1935 to protect several thousand acres of farm woods and newly seeded areas from livestock. Illinois does not have wild goats but has hundreds of thousands of hogs, cattle, sheep and horses which can play havoc on acres newly seeded to grass or planted to trees, and can destroy valuable undergrowth of farm woods.

REGIONAL CONSERVATOR SPEAKS TO "FARM AND HOME WEEK" VISITORS

The soil must be conserved if we are to bring about the necessary stabilization of agriculture, R. E. Uhland told visitors at the annual Farm and Home Week at the University of Illinois, January 13. Mr. Uhland recently was named regional conservator to be in charge of the erosion control program of the Soil Conservation Service in the Upper Mississippi Valley Region.

The cooperation of agricultural colleges, experiment stations and the Agricultural Extension Service has been very helpful in making this program a success, and these agencies will be depended upon a great deal in the future for assistance in carrying on the program for saving the soil for more economic production, Mr. Uhland said. The farm adviser, since he is the county representative of the Extension Service, is an important link in this chain of workers employed to direct the national program.

Erosion is an ever-accelerating action. As the sloping lands get poorer, the rate of washing increases rapidly unless some preventive measures are taken. Mr. Uhland pointed out that 14,000,000 acres or about 40 percent of farm land in Illinois is affected by sheet or gully erosion, or both. Two examples of soil loss in Iowa were illustrated. The first example showed the loss of 15 inches of Marshall silt loam under less than 50 years of cultivation. The second illustration was of a loss of 9 inches of soil in 9 years of continuous corn production on a field of Shelby silt loam with an 8 percent slope.

Mr. Uhland explained that there is a need for much more research work in the field of soil conservation in order to determine the best practices for the variety of conditions which farmers have to face. This need will be met by experimental work on the 11 erosion experiment stations now operated by the U. S. Department of Agriculture and other research stations which will be established.

On one of these experiment stations located at Bethany, Missouri, much valuable data have been obtained. Measurements made last year at this station following a rain of 3.75 inches showed that a plot 146 feet long that was in corn continuously lost soil at the rate of 53.7 tons per acre. A plot half as long (53 feet) lost soil at the rate of 45.6 tons per acre, indicating that erosion is more serious on long slopes following torrential rains. Terraces help to reduce the velocity of run-off rainfall on these long slopes and thus will cut down erosion losses.

The value of soil treatment as an aid in checking erosion was demonstrated on two plots receiving different treatments. Under the same conditions a plot in corn following clover with no treatment lost 1.08 tons of soil per acre; a plot with the same rotation receiving lime and phosphate before clover lost .46 ton per acre. Another plot in continuous bluegrass lost less than .1 ton per acre.

All of the experimental data available will be applied to aid in development of a well-rounded plan of soil conservation. It is the purpose of the Soil Conservation Service to effect a practical land use program for the farmer, Mr. Uhland said. By checking the tremendous loss of agricultural land, farming can be made more secure.

CROPS NEED A BALANCED RATION

The good farmer who is in the livestock business either raises or buys the best animals that he can afford to obtain for a fair price for he knows that quality always "tops the market" and that a good "beef type" animal will fatten more readily on the same amount of feed than will a scrub. There is a limit to the savings that can be made in efficient arrangement of feeding sheds, raising and grinding of feeds, and balancing of rations. Beyond a certain point it is the "eye of the master" that fattens his cattle.

Soil quality is just as important a factor in the efficient growing of profitable crops as beef quality is in the raising of profitable cattle. Plowing, planting, cultivating, and harvesting costs can only be reduced so far. A slight additional yield per acre can make a great deal of difference in the percentage of profit. For example, if the overhead expense of growing an acre of corn amounts, under the prevailing market conditions, to the value of 30 bushels of corn, then the farmer who raises 40 bushels per acre makes twice as much profit as the 35 bushel farmer.

The man who raises 30 bushels per acre is in one sense of the word a marginal farmer. Nor is this condition confined to the farm land of the state that is recognized as poor in quality.

Census figures show that corn yields in Illinois have fallen from an average of 36.7 bushels per acre for the ten-year period ending in 1905 to 33.5 bushels per acre for a similar period ending in 1930. If, as these figures seem to indicate, our soils are decreasing in their productivity what can be done by the average farmer to maintain or raise the "quality" of his land?

The University of Illinois Agricultural Experiment Station has through a long period of years demonstrated upon its experimental fields that the proper use of limestone and legumes--manure and phosphates where necessary and in certain cases potassium will when used in connection with a good rotation maintain or even increase crop returns over a period of years.

In other words we can supply the crop with a balanced ration much as the feeder supplies his livestock. There is, however, one important factor that only the best farmers have previously considered. That is the removal of soil material and plant food due to the process of erosion. Even though we figure a fertility balance and plan to return to the soil the amounts of nitrogen, calcium, phosphorous and potassium that the crops remove, this balance will not be maintained unless we can be assured that these plant food elements will be retained in the soil within reach of the plant roots.

H. H. Bennett, Chief of the Soil Conservation Service, in "The Tragic Truth About Erosion" published by the Forest Preserve Association of New York State, estimates that erosion is removing 21 times more plant food from the soil than the crops themselves.

This, of course, is an estimated average covering all conditions the country over. The Illinois farmer must, however, heed this warning. Soil treatment which establishes a good legume rotation is the basis for erosion control on farm land in Illinois. Management practices which may include contour farming and strip cropping, terraces and contour furrows are necessary ends in preserving a fertility balance. The farmer must study his soil loss problems. Let him watch his fields during a hard rain just as intently as the stockman looks to the health of his cattle. Truly the "eye of the master" is necessary to maintain soil quality.

IMPROVING PASTURES FOR SOIL CONSERVATION

In order to control erosion on a great deal of land in Illinois, it is necessary to improve the present vegetative cover on many acres of pasture and grass land. In general, three methods are available for improving the vegetative cover, and the improvement plan should bring all into operation.

First: Proper selection of pasture crops to suit the soil environment.

Second: Proper selection of soil fertilization and improvement practices which will add to and preserve the elements of soil fertility.

Third: Proper livestock grazing and management practices to permit the establishment and maintenance of adequate cover.

Improvement of the vegetative cover by application of needed limestone, phosphate, potash, and manure is the most permanent and valuable method which may be used. These treatments will encourage the growth of crops to improve the physical condition and add organic matter and nitrogen to the soil. The absorption of water into the soil although being largely determined by the inherent qualities of the soil or soil type is vastly improved by the addition of organic matter. Hence, the amount of organic matter in our soils is a very important factor in preventing runoff of water and soil loss. G.W. Musgrave, working at the Soil Erosion Experiment Station at Clarinda, Iowa, found that the addition of 16 tons of well-rotted manure per acre to silt loam affected a reduction in runoff of 49 percent. Grasses in combination with desirable legumes not only provide excellent erosion control cover, but also are capable of building up the soil organic matter, providing the soil is properly treated. Before many of our pastures can produce legumes for furnishing organic matter and nitrogen, limestone and, in many cases, phosphorus must be applied. In most cases, after the application of these two basic fertilizers it is possible to select legume and grass crops adapted to the various stages of increased fertility until a state of productivity is reached where the most desirable and exacting of pasture plants may be produced.

The following scheme is suggested as a measure for improving scant vegetative cover on eroded pasture land. As early this spring as the soil is workable the pasture should be plowed or thoroughly disced in strips on the contour and the limestone applied and disced into the soil. The seedbed should be well-prepared to mix thefertilizers with the soil and to provide favorable conditions for seedling growth. Superphosphate and fine lime can be applied with the fertilizer attachment on a grain drill, if one is available. If superphosphate is applied with the grain drill, the grass seed flutes of the drill should be disconnected at the bottom and the seed scattered behind the furrow opener to prevent covering the seed too deeply and to prevent the fertilizer from coming in contact with the seed. Where such a drill is not available 800 to 1000 pounds of rock phosphate or 300 to 500 pounds of superphosphate may be placed on well-rotted manure and spread on each acre of the pasture and the pasture mixture broadcast on the field.

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To prevent washing from steep land, the manure should be applied following the discing of the limestone into the soil and should be mixed with the soil by discing on the contour after its application. The manure will furnish nitrogen for plant growth until the newly-seeded legumes have made sufficient growth to be effective in furnishing nitrogen. If this treatment does not immediately improve soil conditions sufficiently to permit the growth of the better legumes, a second seeding including these legumes should be made the following year by which time the fertilizers should be available for plant growth.

A nurse crop should be seeded with the pasture mixture to provide some early grazing and to reduce the soil loss until the slower growing crops have made sufficient growth to protect the soil.

- C. A. VanDoren
Associate Agronomist

TWO YEARS WORK ON SANGAMON RIVER AREA

Five hundred and seventy-eight farmers in the Sangamon River Demonstration Area in McLean and Ford Counties have been cooperating with the Soil Conservation Service to check erosion losses on their farms. A summary of the work done on those farms between November 16,1933, when the project was established, and December 31,1935, is given below:

Acres in Demonstration Area	150,581
Number of farms in area	814
Acres in farms under agreement	99,697
Number of farms under agreement	578
Percentage of farms under agreement	70%
Number of acres completed by detailed erosion survey	150,581
Number of acres on which treatment is finished	65,501
Number of farms with treatment finished	333
Agronomy and Forestry	
Acres agreed to be newly strip cropped under contract	6,368
Acres on which proper rotation newly agreed under contract	74,970
Acres agreed to be taken out of cultivation	10,651
Increased acreage erosion-resisting crops agreed	13,434
Decreased acreage clean-tilled crops agreed	5,310
Acres tree planting	505
Engineering	
Miles of terraces constructed	140
Acres protected by terraces	2,268
Number of permanent terrace outlet structures completed	25
Number of temporary terrace outlet structures completed	1,942
Number of temporary gully dams constructed	6,298
Number of permanent gully dams constructed	116

GAME CONSERVATION

It is in the farmer's power to vastly increase the wealth of wildlife resources in Illinois; in fact, the future welfare of this natural resource rests largely in the hands of the farmer. We can continue the attempts to increase the population of game species by further restrictions on bag limits and open seasons, supplemented by the propagation and release of breeding stock, but these measures will have no permanent effect until the problem is attacked from the more basic angle of rebuilding the habitats.

It has been demonstrated that the most effective as well as the most economical means of increasing the population of a species is by improving its environment. Necessarily this will have to be undertaken by the landowner in the majority of cases. The work which the Soil Conservation Service is conducting on cooperating farms will serve as demonstrations for further work by the landowners.

Too few farmers realize how directly every farm operation effects wildlife. Farm practices can often be modified so as to benefit wildlife and yet in no way conflict with agricultural objectives. We have cleaned up our hedgerows, waste corners, stream banks, and permitted grazing in the woodlots until there is no place left on many farms to support even the most tolerant forms of wildlife. Agricultural operations should not necessarily cause the disappearance of wildlife, for we know that under proper practices they tend to promote populations of certain species. This is especially true of songbirds, Hungarian partridge, ring-neck pheasant and bobwhite quail.

The first efforts in wildlife management by the Soil Conservation Service are directed toward reestablishing the necessary environments, which involves principally the restoration of food and cover plants. This purpose is accomplished in many cases by directly planting the desired species; in other cases by protecting woodlots and stream banks from grazing thereby obtaining the results through the process of plant succession.

Food patches, consisting of a mixture of small grains, are being established on those cooperating farms where the scarcity of food during winter and early spring is a problem in maintaining the animal and bird life. Additional food is being provided by using fruit and berry-bearing trees and shrubs in erosion control plantings.

Where snowfall is a limiting factor in winter survival, as is the case over the northern part of the state, it may often be necessary to supplement the natural food supply with some feeding. This is especially true for upland game birds, which are less fortunate than most songbirds in not being able to avoid the rigors of winter by resorting to migration. A little feeding during critical periods may often be the means of bringing through the winter a covey or two of quail, a few pheasants, and songbirds which would otherwise perish.

E. C. Murdoch
Assistant Biologist

THE PRESIDENT DISCUSSES FOREST MAINTENANCE

"Our forests, with their manifold resources and products, with the abundant opportunities they provide for recreation and inspiration, have been and continue to be a part of the basic pattern woven into our national fabric. Their well-being is essential to the well-being of our people themselves--indeed, it is fortunate that the needs of the forests and the needs of our people fit so well together.

"Today we have in body and spirit a new manifestation of this mutual need--the Civilian Conservation Corps. This organization is sworn to the protection of our forests from fire and misuse; to the rebuilding of our forests, which as a renewable resource capable of management for continuous yield, in turn stand ready to help protect and sustain the lives and happiness of millions of Americans.

"The men of the Civilian Conservation Corps are young. They are being made healthy and vigorous by their work in the forests. They represent America's future. Their work is guided by older hands who have the cumulative forestry knowledge and ideals of the past sixty years. From its beginning in the Department of Agriculture sixty years ago, forestry in the United States has moved steadily toward bringing about wise use of our forest lands. Now, through the Civilian Conservation Corps, forestry is helping to rebuild our youth as well as our forest resources; is helping to shape the destiny of both, and thus contributing materially to our national security.

"Forests, like people, must be constantly productive. The problem of the future of both are interlocked. American forestry efforts must be consolidated and advanced."

FRANKLIN D. ROOSEVELT.

The above statements were contained in a letter from President Roosevelt to the Forestry News Digest and were published in the January 1936 issue of the Digest.

FORESTRY PRINCIPLES APPLIED IN ILLINOIS

The twenty-eight erosion camps in Illinois are applying the above principles on the work projects in the way of woodlot management and the setting out of several acres of new plantings, primarily where erosion is serious.

It is planned to set approximately 25,000,000 trees of different species in these camps this spring. In addition to the erosion camps there are ten CCC camps doing timber stand improvement and planting on the two national forest units in the Ozark sections of southern Illinois.

CAMP SPARTA REPORTS GOOD COOPERATION

Camp SCS-34 at Sparta, Illinois, in cooperation with Randolph County Farm Adviser, working with more than 100 Cooperators is endeavoring to establish a well-coordinated soil conservation and land use program in this area. Basing this program on a good system of farm management, supplemented by various phases of tillage, vegetative, and mechanical erosion control measures, we hope to contribute our share toward the development of a sound and permanent agriculture.

Farm plans are being prepared as rapidly as possible for each of our cooperators, who seem to appreciate this service and are only too glad to sit down with the agronomist and work out a farm plan adapted to their individual needs and based on sound principles of soil conservation and profitable farming.

Considerable interest has already been aroused in pasture improvement although it is a relatively new phase of our program. Several farms have included pasture improvement as part of a well-rounded soil conservation program. Being located in the St. Louis Dairy region, we feel that we can render an extremely valuable service to the agriculture of this area in demonstrating and encouraging the development of good pasture.

Our terracing program at Camp SCS-34 has been slowed up by weather conditions but numerous concrete dams have been built in outlets and general repair work has been done on the projects of last season's program. We have not neglected gully control in this area, as many temporary and permanent structures have been built. Perhaps the greatest accomplishment has been in planning work to be done in the spring and summer. The cooperation is good and it looks like a busy season ahead.

Our timberland improvement program has met with much enthusiasm and good cooperation in this area. The farmers have been quick to realize that steep hillsides and out-of-the-way corners of their farms, which are unsuitable for cultivation or pasture, may well be converted into valuable woodlands. The conservation of soil and moisture is given prime consideration in treating all timber lands. Openings in the stand are planted to species suitable to the site, while great care is taken in removing trees. Game coverts are constructed from brush secured from the trees removed and the remaining debris and brush is lopped and scattered. Three projects of this nature are now being worked and sufficient new projects have been signed up to keep an average of three crews working on timberland during the winter season.

We feel that a good educational program among the farmers of this area is essential to the successful development of a permanent, well-balanced soil conservation program. In cooperation with the Extension Service, College of Agriculture, University of Illinois, and the Okaw Valley Soil Conservation Association, we are holding a series of educational meetings during these winter months. We feel that probably the most important point which we need to stress is the necessary coordination of the various phases of soil conservation. The farmer must realize that no single erosion control measure will solve his problem, but that the reduction of erosion to the minimum depends upon the proper balance between the various erosion control measures and land use practices.

- Raymond S. Brown
Superintendent, Camp SCS-34

EROSION PROBLEMS OF OTHER FARMERS

1. A gullied area on this Lawrence County farm occurs in a pasture which has, in general, one of the best stands of bluegrass in this area. In a few places the topsoil has been lost and sheet or gully erosion have started over a larger area. This is one of those good pastures, which if not attended to now, probably would be ruined by erosion in 15 years. Contour furrows have been built on the small eroded areas and will be seeded in the early spring. The gullied areas have been prepared for tree planting and fenced from livestock.

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2. When the cooperator purchased this 189-acre Woodford County farm, he divided one 40-acre field into three parts and began a rotation of corn, oats, and sweet clover, after liming to correct acidity. He is now able to produce as much on 13 acres of this field as was originally produced on the entire 40 acres. This is principally a dairy farm. A general rotation of corn, oats and sweet clover is being practiced. All but 40 acres of the farm has been limed and it will be treated next year. Gully control structures are being built to establish a large permanent sod waterway which will protect two tile lines.

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3. Lespedeza has proved to be a valuable legume for furnishing pasture on poor soils. However, there are cases where the farmer could have limed and started a better legume but he has chosen lespedeza as the easiest way out. Such an easy way out is not permanent.

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4. On the farm of P.O. Witges in Franklin County, contour furrows plowed in a permanent pasture 12 years ago have checked gullying and have made possible a good stand of grass. The owner plans to replow these furrows or to plow out new ones this year.

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5. Extremely steep slopes on this Morgan County farm are being reclaimed with pasture terraces. Continuous cultivation has resulted in all the topsoil being washed off the 20 percent slopes and deposited on fertile bottomland. Even a great deal of subsoil has been distributed over the rich lowland soils.

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6. All of this 900-acre farm was formerly timbered and is very hilly. Four hundred acres are in partially timbered pasture and 500 acres are in cultivation or hay crop. All of the cultivated land lies on hilltops, and the problem of providing outlets, if this land is terraced, is serious. So much concrete work would be required for the outlets that the expense in most cases would be beyond all reason for such small areas. The land is so rough that the only profitable way to manage it on a long-time basis is to put most of it in grasses or timber.

-Above paragraphs are taken from
Reports of Soil Conservation
Service District Technicians.

CULTIVATION VS. BLUEGRASS SOD

(Comparison on Carroll County Farm)

It is estimated that erosion has removed an average of 62 tons of soil per acre annually from a cultivated field on the farm of E. Michaels in Carroll County. This is a total of approximately 2,500 tons of soil per acre lost from this field since cultivation was begun 40 years ago.

Just 10 feet away, on the opposite side of a line fence, there has been no evident soil loss from a field which has been in good bluegrass sod continuously for the past 40 years. The slope of both of these fields is approximately the same, averaging about 8.5 percent. The maximum gradient is about 13.4 percent. It is at the steepest point near the bottom of the hill where the most severe cutting has occurred in the cultivated field. About 3 feet of soil, which includes all the topsoil, has been washed from the steepest part of the cultivated slope. The greater cutting at this point is the result of increased velocity and greater carrying capacity of runoff rainfall as it flows over the steeper part of the slope. Much of the eroded soil has been deposited on the more nearly level land at the bottom of the hill.

Terraces were constructed on the cultivated field last fall by the Soil Conservation Service. If they had been built before erosion became serious, most of the wasted soil probably could have been saved.

-M. M. Culp
Asst. Agricultural Engineer

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"HOME-MADE" TERRACES EFFECTIVE ON SCHUYLER COUNTY FARM

Terraces which Henry Means built on his farm in Schuyler County twelve years ago still protect a five-acre field against erosion. The terraces were built with a wooden terrace drag and plow pulled by four horses. After twelve years there is only one break in this system of terraces. No other maintenance has been necessary. No artificial outlets were built; instead, runoff rainfall was carried from the terrace system over bluegrass sod without any serious cutting.

Previous to terracing, this field produced corn at the rate of about 20 bushels per acre. After the field was terraced and $3\frac{1}{2}$ tons of limestone per acre was applied, a mixture of red clover, alsike clover, bluegrass, sweet clover and timothy was seeded on the field. There is still maintained an excellent stand of bluegrass and sweet clover without any other treatment. Bluegrass has not choked out the sweet clover in the 12 years. The field is pastured heavily every spring and lightly in the fall.

This field has been an outstanding example of the value of good sod established on terraced land for controlling soil erosion.

PROFIT BY MAKING FARM PLANS EARLY

FARM PLANS for the coming year should be made now. Work usually is slack on most farms during the winter months thus affording greatest opportunity for outlining the farming program. All plans should be made to carry out an effective program of soil conservation.

Detailed plans as to the crop to be grown on each field will prove of great value in checking up on the seed requirements for the coming spring. It is wise to secure the necessary seed early and avoid being caught short when the spring rush comes. These field plans should be checked carefully so that the acreage of the various crops to be grown fit in well with the labor, power and machinery available to prepare the land, plant and cultivate the crops.

It pays big dividends to provide ample pasture and hay to supply the farms needs. This may require some temporary or emergency seedings. Make plans now to meet your summer pasture needs.

Writing out your plans on a map of the farm will make it easier to follow schedule and thus bring about greater efficiency in field operations. The farmer who utilizes these winter evenings by making his farm plans will find his work program much easier to follow during the rush spring and summer work period in the field.

-Farm Management Department.

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SPRING RAINS WILL TAX TERRACES

TERRACES will meet the most severe tests of the year within the next four months. Torrential spring rains will tax terrace systems to the limit. For this reason, every farmer who has terraced land should make sure that his terraces are ready to withstand the test.

Any low places or weak spots should be filled in before the rainy season starts. Newly-built terraces should receive special attention until they become well settled. Where the terraces are well established an occasional check should be made, especially following heavy rains, to prevent any breaks or to repair any which have been made. Farmers will have more time now to check their terraces and make repairs than they will have in the spring planting season.

-Engineering Department

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"MOMENT OF FALSE PROSPERITY"

"I cannot see the glory of cannon carriages, wheel to wheel, no matter how rich the prospects in the lands to conquer. They remind me of the tractors and combines wheel to wheel, that brought a corresponding moment of false prosperity---------and then brought 1921----------and the long ghost march of the years that led up to the dark days of 1932 and 1933".

-Chester C. Davis
AAA Administrator

FORESTER WRITES OF FARMERS INTEREST

Soil Conservation Service:

You will be interested in the following comments I have to make concerning farmers who visited my office during the recent annual Farm and Home Week.

I have been assisting with the forestry programs in Farm and Home Weeks for the past several years, and never before have I had so many visitors coming to my office as I had during the 1936 Farm and Home Week here at the University of Illinois. One thing that struck me as particularly significant was the fact that probably 50% of the men who came in here were seeking information about having their farms reforested or doing planting work and stated that their interest has been aroused in forestry through the work of the C.C.C. camps in their particular localities. This is one bit of evidence we have that the work you people are doing is reaching out farther than the individual farms upon which the work is being done.

- J. E. Davis
Extension Forester
College of Agriculture
University of Illinois

WOODLAND IMPROVEMENT DEMONSTRATIONS BEING HELD

WOODLAND IMPROVEMENT WORK is one of the most worthwhile jobs a farmer can do during the winter months. Extreme care should be exercised in cutting or trimming farm woods.

Demonstrations on woodland improvement are being conducted in camp areas by Soil Conservation Associations in conjunction with the Agricultural Extension Service and the Soil Conservation Service. Many helpful suggestions will be made by Extension Forester, J.E. Davis, of the College of Agriculture, University of Illinois, and representatives of the Soil Conservation Service. Farmers should inquire as to the date the demonstration will be held in their area at the local CCC camp.

General recommendations for woodland improvement work include four major practices.

1. Do not pasture the woodland.
2. Protect wooded areas against fire at all times.
3. Cut only mature trees, dead and diseased trees and young trees where they are too crowded.
4. Favor the growth of the best species and the best trees in each specie.

-- W. F. Peel
Chief Forester

PURPOSE OF SOIL CONSERVATION ASSOCIATIONS

Thirty-two Soil Conservation Associations, covering forty-three counties have been organized in the State of Illinois during the past year.

This action was taken as a result of the Memorandum of Understanding prepared in June under the direction of the Secretary of Agriculture, which stated: "We believe that the Federal Government cannot manage erosion control operations efficiently with hundreds of thousands of individual farmers, but that local group responsibility will have to be obtained through the organization of cooperative control associations or governmental agencies, which should be permanent in character, and legally empowered to own and dispose of real estate, to lay assessments on their members, and otherwise compliance in a complete erosion control program on the area owned or controlled by the members of the association." It provided: "That on and after July 1, 1937, and sooner, wherever feasible, all erosion control work on private lands, including new demonstration projects, be undertaken by the Soil Conservation Service only through legally constituted soil conservation associations or Governmental agencies empowered to function as indicated above"; and recommended: "That beginning immediately, so called work projects be limited strictly to demonstration areas, to publicly-owned lands, and private lands within legally-constituted soil conservation districts."

Following the receipt of the memorandum, a plan of organization was drawn up and in cooperation with the Extension Service of the College of Agriculture associations were formed in all areas where Soil Conservation Service camps or projects were functioning, but one. Membership was made up primarily of Soil Conservation Service cooperators.

The ultimate purpose of these Associations is to provide a permanent organization to promote the adoption of the soil conservation practices, inaugurated by the Soil Conservation Service on its demonstration projects, by all landowners and operators and to carry this program on if, and when, emergency measures, such as that which created the CCC, are either curtailed or discontinued. It is the responsibility of the Soil Conservation Service and the Extension Service to see that the program and leadership of the local associations are developed to such a degree that they are capable of accepting the responsibility of carrying on should it become necessary to withdraw federal aid.

Directors for twelve associations organized to serve seventeen counties are listed here. Directors of associations for seven other counties remain to be reported. Fourteen were reported in the December issue.

CHARLESTON ASSOCIATION (COLES COUNTY)		ELMWOOD ASSOCIATION (PEORIA COUNTY)	
J. R. Sweeney	Charleston	Hubert L. Oakes	Laura
B. F. Mitchell	Charleston	R. H. Bruning	Elmwood
John M. Winkleblack	Charleston	Elmer T. Wilson	Elmwood
J. O. Mark	Mattoon	Will C. Windish	Elmwood
Ralph R. Chambers	Mardin	Paul W. Harker	Trivoli

GREENE COUNTY ASSOCIATION

Henry Longmeyer	Greenfield
K. T. Smith	Greenfield
A. R.McConathy	White Hall
Louis Reisch	Carrollton
John Meister	Carrollton

HENRY COUNTY ASSOCIATION

Leslie Good	Kewanee
George F. Hayes	Galva
Henry L. Larson	Cambridge
John R. Spivey	New Windsor
A. J. Swanson	Cambridge

MCLEAN COUNTY ASSOCIATION

George W. Parker	Bloomington
William McCullough	Bloomington
W. M.Ijams	Downs
Eugene Kline	LeRoy
Joash Stutzman	Carlock

MACOUPIN COUNTY ASSOCIATION

Chris Powars	Palmyra
Enos Waters	Carlinville
H. J. Shultz	Shipman
Paul Rosentreter	Carlinville
W. C. Wohlert	Dorchester

MADISON COUNTY ASSOCIATION

John T. Bohnenstiehl	Edwardsville
Wilbur H. Gehring	Edwardsville
Erwin H. Isenberg	Kaufman
Louis A. Lagemann	Godfrey
August R. Minier	Edwardsville

MERCER COUNTY ASSOCIATION

John W. McHard	Aledo
B. W.Horan	Reynolds
J. G. Woodward	Illinois City
W. C. Harris	Aledo
Lyle C. Bridgford	Joy

MORGAN COUNTY ASSOCIATION

F. A. Seymour	Waverly
R. H. Rolf	Jacksonville
T. P. Langdon	Murrayville
William K. Ransdell	Franklin
Chester Thomason	Chapin
J. W. Dodsworth	Franklin
M. M. Barlow	Jacksonville

R. C. L. W. ASSOCIATION
(Richland, Crawford, Lawrence & Wabash Co.

H. N. Fox	Palestine
Paul Sterchi	Olney
Gentry D. Adams	Allendale
O. G. Lathrop	Sumner
W. H. Nuttall	Lawrenceville

RUSHVILLE DISTRICT ASSOCIATION
(Schuyler, Brown and Cass Counties)

John L. Barton	Rushville
C. V. Bader	Browning
Curtis Mathews	Rushville
J. A. Lantz	Brooklyn
Dwight Fowler	Brooklyn

WILLIAMSON COUNTY ASSOCIATION

Jake Bowyer	Carterville
E. A. Fosse	Marion
L. C. Sander	Marion
Thurman White	Marion
R. E. Venable	Carterville

FARM ADVISER STRESSES SOIL CONSERVATION

"Efficient methods of farming are absolutely wasted if we make no effort to conserve the fundamental resource of agriculture, the soil," said T. W. May, Madison County farm adviser in his 1935 annual report. "Soil Conservation is essential to a permanent agriculture, and the program established in Madison County by the Soil Conservation Service is probably the most important single project ever offered to local farmers. Our farmers have been cooperating very effectively in getting the soil conservation program under way. The erosion control program, including gully control work, terracing, liming and establishing cropping systems to prevent erosion, offers a complete service of soil conservation to farmers and landowners. Every farmer concerned in saving our soil should cooperate in this very important work by taking a membership in the newly organized Madison County Soil Conservation Association. The Association now has eighty-seven members.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ILLINOIS AREA
CHAMPAIGN, ILLINOIS

TO Miss C. R. Barnett

Librarian,

U. S. Department of Agriculture,
Washington, D.C.